

CORRES CONTROL
OUTGOING LTR NO

EG&G ROCKY FLATS

DOE ORDER# 47001
94 RF 11354

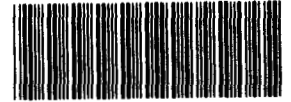
EG&G ROCKY FLATS, INC
ROCKY FLATS PLANT, P O BOX 464, GOLDEN, COLORADO 80402 0464 • (303) 966 7000

DIST	
AMARAL M E	
BURLINGAME A H	
BUSBY W S	
BRANCH D B	
CARNIVAL G J	
DAVIS J G	
FERRERA D W	
FRAY R E	
GEIS J A	
GLOVER W S	
GOLAN P M	
HANNI B J	
HARMAN L K	
HEALY T J	
HEDAH T	
HILBIG J G	
HUTCHINS N M	
JACKSON D T	
KELL R E	
KUESTER A W	
MARX G E	
McDONALD M M	
McKENNA F G	
MONROSE J K	
MORGAN R V	
POTTER G L	
PIZZUTO V M	
RISING T L	
SANDLIN N B	
SCHWARTZ J K	
SETLOCK G H	
STEWART D L	
STIGER S G	X
TOBIN P M	
VOORHEIS G M	
WILSON J M	
Brooks	X
File	X

November 10, 1994

94-RF-11354

Jessie M Roberson
Assistant Manager for
Environmental Restoration
DOE, RFFO



000045102

TRANSMITTAL OF DRAFT APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS
(ARARS) MASTER LIST - SGS-593-94

Action Meeting November 16, 1994

Enclosed, per your request, are thirty-five copies of the draft "Master List" of potential Applicable or Relevant and Appropriate Requirements (ARARs) that may apply to the Rocky Flats Environmental Technology Site. Also per your request, EG&G Rocky Flats, Inc had their subcontractor hand deliver two copies of the draft Master List to both the Environmental Protection Agency and the Colorado Department of Public Health and Environment by 4 00 p m on November 7, 1994

It is EG&G's understanding that the Department of Energy, Rocky Flats Field Office requested a meeting for November 16, 1994, to discuss this document with the regulators. If there are any changes regarding this meeting, please immediately contact L M (Laura) Brooks on extension 6973 or digital page 6166

CORRES CONTROL X X
ERPD Rec Center X 2
PATS/T130G

S G Stiger, Director
Environmental Restoration
Program Division

CLASSIFICATION
UCNI
UNCLASSIFIED
CONFIDENTIAL
SECRET

LMB kld

Orig and 1 cc - J M Roberson

Enclosure
As Stated

AUTHORIZED CLASSIFIER
SIGNATURE

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE
IN REPLY TO RFP CC NO

cc
M N Silverman - DOE/RFFO w/o attachment

ACTION ITEM STATUS
X PARTIAL OPEN
J CLOSED

LTR APPROVALS
LMB: kld
ORIG & TYPIST INITIALS
LMB: kld



ADMIN RECCRD

SW-A-003721

1/48

4/487



INTEROFFICE CORRESPONDENCE

DATE November 9, 1994

TO Distribution

FROM L M Brooks, ERPD Program Support, Building 080, X6973

SUBJECT UPDATE ON APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS
STRATEGY - LMB-030-94

DOE Order 4700 1

Action None

Attached is the draft "Master List" of potential Applicable or Relevant and Appropriate Requirements (ARARs) that may apply to the Rocky Flats Environmental Technology Site which was submitted to the regulators on November 7 1994

The Department of Energy, Rocky Flats Field Office (DOE, RFFO) has requested a meeting to be held on November 16, 1994, with the Environmental Protection Agency and the Colorado Department of Public Health and Environment to discuss the Master List. Currently I do not anticipate that everyone on the EG&G ARARs team would need to attend the initial and/or subsequent meetings with the regulators. However, if it is known in advance what area of the Masters List is to be discussed at a ARARs working group meeting, the expert in that area should plan on attending the meeting. I will keep everyone posted as to when the initial meeting will actually occur and what is scheduled to be discussed, if known.

Thanks to everyone on the EG&G ARARs team for contributing to the development of the Masters List. This has been a challenging process and could not have been completed as quickly as it was done without each of you supporting and contributing to the effort. **THANK YOU!!**

kld

Distribution

R J Crocker
R E Fiehweg
L A Guinn
J K Hopkins
M E Levin
S G Stiger
S A Wagner
D A Ward

cc
ERPD Records Center

**DRAFT MASTER LIST OF POTENTIAL
FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE**

November 1994
Draft

TABLE OF CONTENTS

ARAR/TBC DEFINITION AND IDENTIFICATION	IV
ARAR Definitions	IV
Types of ARARs	V
To-Be-Considered Standards	VI
State ARARs	VI
Offsite Response Actions	VII
Delegation of Presidential CERCLA Responsibilities	VII
ARAR Identification Process	VIII
ATOMIC ENERGY ACT (AEA)	1
RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT	1
RADIATION PROTECTION OF THE PUBLIC	1
RADIOACTIVE WASTE MANAGEMENT	2
ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR MANAGEMENT AND DISPOSAL OF SPENT NUCLEAR FUEL, HIGH-LEVEL AND TRANSURANIC RADIOACTIVE WASTES	2
LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE	3
CLEAN AIR ACT (CAA)	4
AMBIENT AIR QUALITY STANDARDS	4
COLORADO AIR POLLUTION REGULATIONS	4
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS	5
FEDERAL WATER POLLUTION CONTROL ACT {aka Clean Water Act (CWA)}	6
WATER QUALITY CRITERIA - GOLD BOOK	6
COLORADO BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER	7
COLORADO BASIC STANDARDS FOR GROUND WATER	8
TOXIC POLLUTANT EFFLUENT STANDARDS	8
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS	9
DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES	9
DOE COMPLIANCE WITH FLOODPLAIN/WETLANDS ENVIRONMENTAL REVIEW REQUIREMENTS	9
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS	10
ENDANGERED SPECIES ACT (ESA)	10
BIOLOGICAL ASSESSMENT	10
INTERAGENCY COOPERATION	10

4

#

TABLE OF CONTENTS (continued)

LISTING ENDANGERED AND THREATENED SPECIES AND DESIGNATING CRITICAL HABITAT	10
ENDANGERED AND THREATENED WILDLIFE AND PLANTS	11
MIGRATORY BIRD TREATY	11
TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS	11
EAGLE PROTECTION ACTS	11
BALD AND GOLDEN EAGLES	11
COLORADO NONGAME, ENDANGERED, OR THREATENED SPECIES CONSERVATION ACT	12
COLORADO NONGAME WILDLIFE	12
FISH AND WILDLIFE COORDINATION ACT	13
NATIONAL HISTORIC PRESERVATION ACT (NHPA)	14
IDENTIFYING HISTORIC PROPERTIES	14
ASSESSING EFFECTS OF THE ACTIVITY ON THE PROPERTY	14
DOCUMENTATION REQUIREMENTS	14
CRITERIA OF EFFECT AND ADVERSE EFFECT	14
PROTECTING NATIONAL HISTORIC LANDMARKS	14
HISTORIC PROPERTIES DISCOVERED DURING IMPLEMENTATION	14
EMERGENCY UNDERTAKINGS	14
PRESERVATION OF AMERICAN ANTIQUITIES	14
PROTECTION OF ARCHEOLOGICAL RESOURCES	14
COLORADO HISTORICAL, PREHISTORICAL, AND ARCHAEOLOGICAL RESOURCES	15
ARCHAEOLOGICAL RESOURCES PROTECTION ACT	15
PROTECTION OF ARCHAEOLOGICAL RESOURCES UNIFORM REGULATIONS	15
ARCHAEOLOGICAL AND HISTORICAL PRESERVATION ACT (AHPA)	16
SAFE DRINKING WATER ACT (SDWA)	17
COLORADO PRIMARY DRINKING WATER REGULATIONS	17
MAXIMUM CONTAMINANT LEVEL GOALS	17
SOLID WASTE DISPOSAL ACT (aka Resource Conservation and Recovery Act)	18
SUBTITLE C HAZARDOUS WASTE MANAGEMENT	18
SITING OF HAZARDOUS WASTE DISPOSAL SITES	18
GENERATOR STANDARDS	18
GENERAL FACILITY STANDARDS	19
PREPAREDNESS AND PREVENTION	20
CONTINGENCY PLAN AND EMERGENCY PROCEDURES	21

TABLE OF CONTENTS (continued)

GROUND WATER PROTECTION	21
CLOSURE AND POST-CLOSURE	24
USE AND MANAGEMENT OF CONTAINERS	24
TANK SYSTEMS	25
SURFACE IMPOUNDMENTS	25
WASTE PILES	26
LAND TREATMENT	26
LANDFILLS	26
INCINERATORS	26
CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS	27
MISCELLANEOUS UNITS	27
AIR EMISSION STANDARDS FOR PROCESS VENTS	28
AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS	29
CONTAINMENT BUILDINGS	30
AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (PROPOSED)	30
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE	30
LAND DISPOSAL TREATMENT STANDARDS	31
SUBTITLE D STATE OR REGIONAL SOLID WASTE PLANS	33
CLOSURE AND POST-CLOSURE	33
SUBTITLE I REGULATION OF UNDERGROUND STORAGE TANKS	34
UNDERGROUND STORAGE TANK REQUIREMENTS	34
TOXIC SUBSTANCES CONTROL ACT (TSCA)	35
LABELING OF PCBs AND PCB ITEMS	35
DISPOSAL REQUIREMENTS	35
STORAGE REQUIREMENTS FOR PCBs	35
INCINERATION	35
CHEMICAL WASTE LANDFILLS	36
DECONTAMINATION	36
PCB SPILL CLEANUP	36

ARAR/TBC DEFINITION AND IDENTIFICATION

As required by CERCLA Section 121(d), remedial actions must clean up hazardous substances, pollutants, and contaminants released into the environment. This section also requires that, with respect to any hazardous substance, pollutant, or contaminant that will remain onsite, the remedial action achieve, at completion, a level or standard of control for such hazardous substance, pollutant, or contaminant which at least attains such legally applicable or relevant and appropriate standard, requirement, criterion, or limitation under Federal environmental law or any promulgated standard, requirement, criterion, or limitation under a State environmental or facility siting law that is more stringent than the Federal standard, requirement, criterion, or limitation.

The purpose of this document is to identify a master list of potential applicable or relevant and appropriate requirements (ARARs) and To Be Considered (TBC) standards for onsite remedial actions being conducted at the Rocky Flats Environmental Technology Site (RFETS). The master list of potential ARARs is provided as Table 1 and will be used as the basis to select the ARARs that will need to be adhered to for the onsite remedial alternatives identified for individual Operable Units (OUs). The purpose of Table 1 is to promote consistency in the ARAR identification process at the RFETS and to facilitate the development of a consistent means to comply with the identified ARARs.

Table 1 is intended to be a tool to be used as a starting point for identifying ARARs on a remedial alternative basis. Table 1 may be too extensive for some remedial alternatives and may not include every potential ARAR for other alternatives. The NCP and EPA guidelines state that the identification of ARARs is conducted on a site-specific basis for each remedial action under consideration. The rationale as to why a particular statutory or regulatory requirement is determined to be an ARAR is to be documented for each remedial action alternative being considered during the detailed analysis of alternatives. Since chemical-specific ARARs will generally be the same for all alternatives, a single list is sufficient and does not need to be repeated for each alternative. Documentation may also be appropriate in some cases when a potential ARAR is initially identified but ultimately is determined not to be an ARAR. The factors associated with the elimination of the initially identified ARAR should be explained in sufficient detail so that the basis of the decision can be understood by the approving authority. The above documentation will be presented as an appendix to the Corrective Measures Study/Feasibility Study (CMS/FS) report.

The remainder of this introduction section is devoted to explaining the ARAR identification process and to provide additional details regarding the development of Table 1.

ARAR Definitions

To ensure protection of human health and the environment, and to ensure proper management of remediation waste, the lead agency, in conjunction with the supporting agencies, is required to identify those promulgated standards, requirements, criteria, or

limitations that will be met during the implementation of the remedy. The identified promulgated standards, requirements, criteria, or limitations are called ARARs. As defined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), ARARs are as follows:

Applicable Requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site. Only those standards that are identified by a State in a timely manner and that are more stringent than Federal requirements may be applicable. [See 40 CFR 300.5]

Relevant and Appropriate Requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those State standards that are identified in a timely manner and are more stringent than Federal requirements may be relevant and appropriate. [See 40 CFR 300.5]

Types of ARARs

The EPA established the three ARAR categories listed below to identify and classify ARARs. The categories are used as guidance since some ARARs do not necessarily fall into this classification system. The type of ARAR is identified in the "Type" column in Table 1.

- Chemical-specific requirements are usually health- or risk-based numerical values or methodologies which, when applied to site-specific conditions, result in the establishment of numerical values. These values establish the acceptable amount or concentration of a chemical that may be found in or discharged to the ambient environment (i.e., air emissions, wastewater discharges, etc.).
- Location-specific requirements are restrictions placed on the concentration of hazardous substances solely because they occur in special locations. Typical location restrictions include areas with sensitive or unique characteristics such as wetlands, areas of historical significance, or areas situated in locations requiring special precautions because of seismic activity or floodplains.

- Action-specific requirements are usually technology- or activity-based requirements or limitations on actions taken with respect to management of the remediation waste or closure of the facility. These requirements are triggered by the particular remedial activities that are selected to accomplish a remedy.

To-Be-Considered Standards

In addition to ARARs, the lead and support agencies may, when appropriate, identify other non-promulgated advisories, criteria, guidance documents, or proposed regulations that are TBC to supplement an ARAR provision for a particular release. TBCs are typically issued by Federal or State governments, are not legally binding, and do not have the status as potential ARARs. However, TBCs are used in determining the necessary level of cleanup for the protection of human health and the environment. The March 8, 1990 preamble to the final NCP rule (see 55 FR 8746) indicates that the use of TBCs is discretionary rather than mandatory, however, their incorporation is recommended.

Of particular importance to the RFETS is the inclusion of DOE Orders along with or in lieu of other identified ARARs and TBCs. Since DOE Orders are not promulgated standards, they do not qualify as ARARs under the CERCLA definitions. However, DOE Orders may be contractually enforceable on contractors that operate or manage a DOE facility. To the extent that DOE Orders supplement the implementation of an identified ARAR, they will be treated as TBCs to develop a protective remedy. Where DOE Orders conflict with an identified ARAR, either contractual relief from DOE, regulatory variance, statutory inconsistency determination (i.e., RCRA Section 1006), or a CERCLA waiver may be required.

State ARARs

Under the NCP and CERCLA Section 121, remedial actions must comply with ARARs which include State promulgated environmental regulations that are more stringent than Federal environmental requirements and that are identified in a timely manner by the State. With respect to potential State ARARs, the term "promulgated" is defined to mean regulations of "general applicability [and] legally enforceable" [See 40 CFR 300.400(g)]. A State requirement or standard is "of general applicability" if it applies to similar situations in the State. The March 8, 1990 preamble to the NCP defines the term "legally enforceable" to mean State regulations issued in accordance with pertinent State procedures and that "contain specific enforcement provisions or [are] otherwise enforceable under State law" (See 55 FR 8746).

In terms of identifying more stringent State requirements as ARARs, Section 121(d)(2)(C) of CERCLA states that "[A] State standard, requirement, criteria, or limitation (including any State siting standard or requirement) which could effectively result in the statewide prohibition of land disposal of hazardous substances, pollutants, or contaminants shall not apply" unless the following conditions are met:

- The State standard, requirement, criterion, or limitation is of general applicability and was adopted by formal means,
- The State standard, requirement, criterion, or limitation was adopted on the basis of hydrologic, geologic, or other relevant considerations and was not adopted for the purpose of precluding onsite remedial actions or other land disposal for reasons unrelated to protection of human health and the environment, and
- The State arranges for, and assures payment of the incremental costs of utilizing, a facility for disposition of the hazardous substances, pollutants, or contaminants

Offsite Response Actions

Offsite response actions must comply with all legally applicable requirements, both substantive and administrative. The concept of "relevant and appropriate" is not available for offsite actions [See page xvii, *CERCLA Compliance with Other Laws Manual Part I* (EPA/540/G-89/006)]. Therefore, the determination of whether the response action is either onsite or offsite is critical in determining what requirements must be complied with. Especially, for air, wastewater, and underground injection discharges. Table 1 is not inclusive of all regulatory requirements that may be applicable to offsite response actions.

Delegation of Presidential CERCLA Responsibilities

The presidential provisions for implementing CERCLA were delegated to various federal agencies in accordance with Executive Order 12580. This Executive Order delegates certain aspects to the Secretary of Energy with respect to releases or threatened releases where either the release is on any facility or the sole source of the release is from any facility or vessel under the jurisdiction, custody, or control of the DOE. These functions must be exercised consistent with the requirements of CERCLA Section 120. [See Executive Order 12580, Section 2(d)] CERCLA Section 120(a) states,

"Each department of the United States shall be subject to, and comply with [CERCLA] in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity. All guidelines, rules, regulations, and criteria which are applicable [to other facilities] shall also be applicable to facilities which are owned or operated by a department of the United States. No department may adopt or utilize any such guidelines, rules, regulations, or criteria which are inconsistent with the guidelines, rules, regulations, and criteria established by the [EPA] under [CERCLA]."

Specifically with respect to the identification of ARARs and TBCs, the NCP [40 CFR 300 430(g)] states,

"The lead and support agencies shall identify requirements applicable to the release or the remedial action. If a requirement is not applicable, the requirement may still be relevant and appropriate. In addition to applicable or relevant and appropriate requirements, the lead and support agencies may, as appropriate, identify other advisories, criteria, or guidance to be considered [TBC] for a particular release."

As provided by Executive Order 12580 and defined in the NCP, the DOE is the lead agency where the release is on a facility, or the sole source of the release is from, a facility or vessel under the jurisdiction, custody, or control of the DOE. [Also see DOE's responsibilities as identified in 40 CFR 300 175(b)(5)]. The support agency furnishes data, reviews documents, may concur on decision documents, and provides other assistance as requested by the Remedial Project Manager. The EPA or a state may be support agencies pursuant to an agreement. The IAG is considered the agreement that establishes the functions of the lead and support agencies. However, provisions which dictate how ARARs and TBCs are to be identified are not specified in the IAG. In the absence of these specific IAG provisions, the DOE must follow all guidelines, rules, regulations, and criteria in the same manner and to the same extent as any nongovernmental entity.

ARAR Identification Process

The process of identifying ARARs and TBCs is specified in CERCLA Section 121, 40 CFR 300 400(g), 40 CFR 300 430(e)(2), and 40 CFR 300 515(d). In addition to the above-mentioned statutory and regulatory requirements, the EPA has published the following guidance documents for identification of ARARs and TBCs:

- *CERCLA Compliance with Other Laws Manual Interim Final (EPA/540/G-89/006)*, August 1988,
- *CERCLA Compliance with Other Laws Manual - Part II Clean Air Act and Other Environmental Statutes and State Requirements (EPA/540/G-89/009)*, August 1989;
- *Superfund LDR Guide #5 - Determining When Land Disposal Restrictions Are Applicable to CERCLA Response Action (OSWER 9347 3-05FS)*, July 1989,
- *Superfund LDR Guide #7 - Determining When Land Disposal Restrictions Are Relevant and Appropriate to CERCLA Response Action (OSWER 9347 3-07FS)*, December 1989;

NS

- *ARARs Q&As Compliance with Federal Water Quality Criteria (OSWER 9234 2-09/FS)*, June 1990,
- *ARARs Q&As Compliance with the Toxicity Characteristics Rule. Part 1 (OSWER 9234 2-08/FS)*, May 1990,
- *ARARs Q&As General Policy RCRA, CWA, SDWA (OSWER 9234 2-01/FS)*, May 1989,
- *ARARs Q&As The Fund-Balancing Waiver (OSWER 9234 2-13/FS)*, January 1991,
- *CERCLA Compliance with Other Laws Manual RCRA ARARs - Focus on Closure Requirements (OSWER 9234 2-04/FS)*, October 1989; and
- *CERCLA Compliance with Other Laws Manual Overview of ARARs - Focus on ARAR Waivers (OSWER 9234 2-03/FS)*, December, 1989

The process of identification of ARARs is described and graphically depicted in Section 1 2 4 of the *CERCLA Compliance with Other Laws Manual Interim Final (EPA/540/G-89/006)*, August 1988. In general, the identification process involves a two-part evaluation to determine if the promulgated environmental requirement is applicable or, if not applicable, relevant and appropriate.

The first step in this process is to determine if the requirement is applicable. The basic criterion for determining if a requirement is applicable is that it directly and fully addresses or regulates the hazardous substance, pollutant, contaminant, action being taken, or other circumstance at the site. To determine if the particular requirement is legally applicable, it is necessary to refer to the terms, definitions, and jurisdictional prerequisites of the statute or regulation. All pertinent jurisdictional prerequisites must be met for the requirement to be applicable. In addition, previous court decisions could also play an important role in determining if a particular requirement is applicable.

If the requirement is not applicable, the second step is to decide if it is both relevant and appropriate. The basic considerations to make this decision are to determine if the requirement 1) regulates or addresses problems or situations sufficiently similar to those encountered at the CERCLA site (i.e., relevance), and 2) is appropriate to the circumstances of the release or threatened release such that its use is well suited to the particular site. Determining if requirements are relevant and appropriate is site-specific and must be based on best professional judgement including the characteristics of the remedial action, the hazardous substances present at the site, and the physical circumstances of the site and of the release. The site-specific conditions must be compared to the statutory or regulatory requirements. The EPA further clarifies that requirements determined to be relevant and appropriate do not need to be legally enforceable (see 58 FR 8743).

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
ATOMIC ENERGY ACT (AEA) [42 USC 2200 et. seq.]			
RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT <ul style="list-style-type: none"> • Radiation Protection Standard - All Pathways • Radiation Protection Standard - Airborne Emissions • Radiation Protection Standard - TRU Waste Storage/Disposal • ALARA Process • Effluent Discharges to Surface Waters • Effluent Discharges to Sanitary Sewer Systems • Residual Radioactivity Levels (Real Property, Materials, and Equipment) • Monitoring and Surveillance 	DOE Order 5400 5 {10 CFR 834, Proposed} Chapter II 1a and III {834 101} Chapter II 1b {834 102} Chapter II 1c {834 109} Chapter II 2 {834 11} Chapter II 3a {834 201} Chapter II 3d {834 203} Chapter II 5 and IV {834, Subpart D} Chapter II 6 {834 10}	TBC	This DOE Order establishes criteria for the protection of human health and the environment to ensure radiation exposure resulting from DOE activities does not exceed an effective equivalent dose for 100 mrem per year. This radiation dose limit also forms the basis for the release of radionuclides to the environment and the release of properties for unrestricted use
	10 CFR 20 1301 2003 2004 2005	TBC	For onsite response actions, NRC requirements are not applicable to CERCLA activities conducted at the RFETS, DOE is required to and has established programs to manage radioactive operations and waste. Although NRC regulations may be relevant, these NRC standards are not considered to be appropriate if DOE Orders adequately establish standards of control for the management of radioactive materials to ensure protection of human health and the environment. In cases where a DOE Order specifies requirements that are inconsistent with NRC standards, the DOE requirement will be followed unless specifically waived by DOE in order to adopt the NRC standard
RADIATION PROTECTION OF THE PUBLIC			
<ul style="list-style-type: none"> • Radiation Protection Standard - All Pathways • Effluent Discharges to Sanitary Sewer Systems • Treatment or Disposal by Incineration • Disposal of Specific Waste 			

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
ATOMIC ENERGY ACT (AEA) [42 USC 2200 et. seq.]			
RADIOACTIVE WASTE MANAGEMENT			
<ul style="list-style-type: none"> • Management of Transuranic Waste <ul style="list-style-type: none"> - Temporary Storage at Generating Sites • Management of Low-Level Waste <ul style="list-style-type: none"> - Performance Objectives - Performance Assessment - Waste Characterization - Disposal - Disposal Site Closure/Post Closure - Environmental Monitoring 	DOE Order 5280 2A Chapter II 3e(4) to 3e(7) Chapter III 3a 3b 3e(5) 3i 3j 3k	TBC	
ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR MANAGEMENT AND DISPOSAL OF SPENT NUCLEAR FUEL, HIGH-LEVEL AND TRANSURANIC RADIOACTIVE WASTES	40 CFR 191		Standard applies to transuranic wastes only
<ul style="list-style-type: none"> • Radiation Dose Standard 	03(b)	C	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

7/14

TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Requirement	Citation	Type	Comment
ATOMIC ENERGY ACT (AEA) [42 USC 2200 et. seq.]			
LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE			
<ul style="list-style-type: none"> • Radiation Protection • Access Restrictions • Future Impacts • Site Siting/Stability 	10 CFR 61		
<ul style="list-style-type: none"> • Drainage Controls/Floodplains 	41 & 52(a)(6) 42 50(a)(2), (3) & (11) 50(a)(4), (7), (8), (9) & (10) 50(a)(5), (6) & 51(a)(4), (5), (6), (9), & (10) 51(a)(1) & 52(a)(2) 52(a)(8) & 53(d) 53 55, 56, & 52(a)(11)	TBC	
<ul style="list-style-type: none"> • Final Cover • Buffer Zone • Ground Water Monitoring • Waste Disposal Requirements 			

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

7/15

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA) [42 USC 7401 et. seq.]			
AMBIENT AIR QUALITY STANDARDS <ul style="list-style-type: none"> • Sulfur Dioxide • Particulate Matter (PM10) • Carbon Monoxide • Ozone • Nitrogen Dioxide • Lead • Total Suspended Particulates 	5 CCR 1001-14 [40 CFR 50]	C	<p>Ambient air quality standards are considered to be chemical- specific ARARs to assess the quality of ambient air and the need to remediate a particular IHSS to maintain the quality of the ambient air. RFETS is located in a non-attainment zone for particulate matter and ozone.</p> <p>Ambient air quality standards are not effluent discharge limitations, they are used in conjunction with air dispersion modeling to establish discharge limits that are protective of air quality.</p>
COLORADO AIR POLLUTION REGULATIONS <ul style="list-style-type: none"> • Emission Control Regulations for Particulates, Smokes, Carbon Monoxide, and Sulfur Oxides <ul style="list-style-type: none"> - Particulates - Emission Monitoring Requirements for Existing Sources - Sulfur Dioxide Emission Regulations • Odor Emissions • Standards of Performance for New Stationary Sources • Emissions of Volatile Organic Compounds • Control of Hazardous Air Pollutants • Emissions of Ozone-Depleting Compounds 	5 CCR 1001 [40 CFR 52, Subpart G] Regulation No. 1 Regulation No. 2 Regulation No. 6 Regulation No. 7 Regulation No. 8 Regulation No. 15	A	<p>Regulation No. 1, Section III D(2)(b), (c), (f), and (h) requires control measurements to be implemented for construction activities, haul roads, haul trucks, and demolition activities, respectively, to prevent the emission of fugitive particulates in excess of air standards. Other portions of Regulation No. 1 would be an ARAR only if the remedial action involves the specific emission source regulated.</p> <p>Regulation No. 2 prohibits odorous air contaminants from any single source to be emitted in detectable odors which are measured in excess of the air standards.</p> <p>Regulation Nos. 6, 7, 8, and 15 would be an ARAR only if the remedial action involves the specific emission source regulated.</p>

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

16

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA) [42 USC 7401 et. seq.]			
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS			
<ul style="list-style-type: none"> • National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities <ul style="list-style-type: none"> - Standard - Emission Monitoring and Test Procedures - Compliance and Reporting • National Emission Standards for Radon Emissions from Department of Energy Facilities <ul style="list-style-type: none"> - Standard - Exemption from the Reporting and Testing Requirements of 40 CFR 61.10 	<p>40 CFR 61, Subpart H</p> <p>92 93 94</p> <p>40 CFR 61, Subpart Q</p> <p>192 193</p>	A	<p>Demonstration of compliance with 40 CFR 61.92 is performed on a site-wide basis taking into consideration all RFETS sources. Stack monitoring is required for all release points which could contribute greater than 0.1 mrem/yr.</p> <p>40 CFR 61.192 was developed primarily for UMTRA sites. Application of the standard to the container storage of waste within structures is questionable.</p>

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT {aka Clean Water Act (CWA)} [33 USC 1251 et. seq.]			
WATER QUALITY CRITERIA - GOLD BOOK	33 USC 1314 (CWA Section 304)	C	<p>The "Gold Book" presents guidelines with respect to water quality criteria for toxic pollutants. Criteria are published for aquatic and human health. The water quality criteria are not promulgated standards, however, they are established guidelines used for developing NPDES permits and may be considered potentially relevant and appropriate. WQC should not be used as effluent limits, rather discharge limits should be established either through the NPDES or UIC permitting process.</p> <p>Although water criteria are non-promulgated and non-enforceable standards, Section 121(d)(2)(B)(i) of CERCLA as implemented by the NCP (40 CFR 300.430(e)(2)(i)(E)) specifies that WQC established under Sections 303 and 304 of the CWA shall be attained where relevant and appropriate under the circumstances of the release. The designated or potential use of the surface or ground water, the environmental media affected, the purpose for which the WQC were developed, and the latest information are to be considered in determining the relevance and appropriateness of the WQC to the response action. Therefore, the need to comply with WQC as a relevant and appropriate requirement needs to be determined on a case-by-case basis using the factors listed above.</p>

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT {aka Clean Water Act (CWA)} [33 USC 1251 et. seq.]			
COLORADO BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER	5 CCR 1002-8		The statewide and site-specific surface water standards, and the standards associated with the site-specific use classifications, will be considered potential ARARs, except standards not associated with a use classification and AEA regulated radionuclides. Site-specific standards not associated with a use classification and AEA regulated radionuclides are not ARARs because they do not meet the criteria of "general applicability" and/or enforceability in 40 CFR 300.400(g)(4) and are, therefore, not "promulgated." When permanent structures are put in place so that surface waters from RFETS no longer flow into, or have the potential to flow into, immediate downstream drinking water supplies, the existing domestic use classification would not be considered relevant or appropriate. DOE also intends to file a petition with the Colorado Water Quality Control Commission to change the use classification, when these structures are employed. DOE has identified the downstream RFETS boundary as the point of compliance.
<ul style="list-style-type: none"> • Antidegradation Rule • Water Quality-Based Designations • Basic Standards Applicable to Surface Waters of the State <ul style="list-style-type: none"> - Descriptive Standards for Substances from Point and Nonpoint Sources - Standards for Radioactive Materials - Standards for Organics - Salinity and Suspended Solids • State Use Classifications <ul style="list-style-type: none"> - Classifications - Areas Requiring Special Protection • Testing Procedures <ul style="list-style-type: none"> - Introduction - Numeric Levels - Standard Test Procedures - Bioassay Procedures 	3 1 8, (2) 3 1 11, (1) 3 1 11, (2) 3 1 11, (3) 3 1 12 3 1 13, (1) 3 1 13, (3) 3 1 16, (1) 3 1 16, (2)(a) 3 1 16, (2)(b)	C	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT {aka Clean Water Act (CWA)} [33 USC 1251 et. seq.]			
COLORADO BASIC STANDARDS FOR GROUND WATER			
<ul style="list-style-type: none"> • Classifications of Ground Water <ul style="list-style-type: none"> - Ground Water Classifications - Criteria Used to Identify Classifications for Ground Water - Specified Area • Ground Water Quality Standards <ul style="list-style-type: none"> - Narrative Standards - Numerical Standards - Statewide Standards • Point of Compliance 	5 CCR 1002-8, 3 11 4 (a) 3 11 4 (b) 3 11 4 (c) 3 11 5 (a) 3 11 5 (b) 3 11 5 (c) 3 11 6 (a) to (e)	C	Despite questions about enforceability, the Statewide ground water standards will be considered potential ARARs, except standards for AEA regulated radionuclides DOE has identified the downgradient RFETS boundary as the point of compliance. The Colorado site-specific ground water use classifications, and their associated standards, (5 CCR 1002-8, Section 3 12 7) are not considered to be ARARs because those standards and associated use classifications have not been applied or developed consistently throughout the State. Thus the standards fail the National Contingency Plan criteria of "general applicability" in 40 CFR 300 400(g)(4) and are, therefore, not "promulgated." Also, site-specific standards for atrazine and simazine, and Statewide and site-specific standards for AEA regulated radionuclides, are not considered to be ARARs because they do not meet the general applicability/promulgated test and/or enforceability criteria. RFETS is the only industrial site in Colorado that has the State ground water use classifications of domestic use quality, agricultural use quality and surface water protection imposed upon a specific site (5 CCR 1002-8, Section 3 12 7). As the standards do not apply to any others, they are not "generally applicable" and therefore should not be used as ARARs.
TOXIC POLLUTANT EFFLUENT STANDARDS			
<ul style="list-style-type: none"> • Toxic Pollutants • Compliance 	40 CFR 129 4 40 CFR 129 5	A	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT {aka Clean Water Act (CWA)} [33 USC 1251 et. seq.]			
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS			
• Designation of Hazardous Substances	40 CFR 116	A	These subparts are applicable to storage and use of products that contain toxic and hazardous pollutants above reportable quantity limitations, at a facility covered by an NPDES permit Only substantive portions of the regulations are required under CERCLA actions for onsite activities
• Determination of Reportable Quantities for Hazardous Substances	40 CFR 117		
• Applicability of Best Management Practices	40 CFR 125 102		
• Best Management Practices Programs	40 CFR 125 104		
DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES			
• Discharges Requiring Permits	33 USC 1344 33 CFR 323 3	A/L	Only substantive portions of the regulations are required under CERCLA actions for onsite activities
DOE COMPLIANCE WITH FLOODPLAIN/WETLANDS ENVIRONMENTAL REVIEW REQUIREMENTS			
• Floodplain/Wetlands Determination	10 CFR 1022	A/L	
• Floodplain/Wetlands Assessment	11		
• Applicant Responsibilities	12 13		

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

21

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
ENDANGERED SPECIES ACT (ESA) [16 USC 1531 et seq.]			
BIOLOGICAL ASSESSMENT	50 CFR 402 12(a) 12(b) 12(c) 12(d) 12(d)(1) 12(d)(2) 12(e) 12(f) 12(g) 12(h) 12(i) 12(j) 12(k)	L	Substantive compliance with the ESA is the responsibility of each Federal agency. In cases where more than one Federal agency is involved in an action a lead Federal agency, as determined among the Federal agencies participating in the action, is designated. The burden of consultation as required under ESA Section 7 and subsequent preparation of a biological assessment if appropriate is the responsibility of the lead Federal agency. Federal agencies must use the consultation process to determine if their action poses an adverse impact to threatened and endangered species and their critical habitat. It is within the spirit of the act that Federal agencies also consider candidate species, especially those species that may be headed toward listing, in their environmental planning.
INTERAGENCY COOPERATION	50 CFR 402 13(a),(b) 14(a)-(l)	L	The U S Fish and Wildlife Service will be consulted as necessary to ensure that appropriate steps are taken pursuant to the ESA to protect Federal listed threatened and endangered species and their critical habitats.
LISTING ENDANGERED AND THREATENED SPECIES AND DESIGNATING CRITICAL HABITAT	50 CFR 424 11 12	L	
<ul style="list-style-type: none"> • Factors for Listing, Delisting, or Reclassifying Species • Criteria for Designating Critical Habitat 			

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
ENDANGERED AND THREATENED WILDLIFE AND PLANTS	50 CFR 17		Current lists of threatened and endangered species of animals and plants pertinent to the ESA and of concern to DOE-RFFO at the Site should be obtained from the U S Fish and Wildlife Service, Colorado Field Office
<ul style="list-style-type: none"> • List of Endangered and Threatened Wildlife • List of Endangered and Threatened Plants • Interagency Cooperation Critical Habitats • Interagency Cooperation Critical Habitats - Fish and Wildlife • Interagency Cooperation Critical Habitats - Plants 	11 12 94 95 96	L	
MIGRATORY BIRD TREATY [16 USC 701-715]			
TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS			
<ul style="list-style-type: none"> • The Purpose of the Regulation • List of Migratory Birds • Law Enforcement Offices • Civil Procedures 	50 CFR 10 1 50 CFR 10 13 50 CFR 10 22 50 CFR 11	L	
EAGLE PROTECTION ACTS [16 USC 668 et. seq.]			
BALD AND GOLDEN EAGLES			
<ul style="list-style-type: none"> • Prohibited Acts, Criminal Penalties • Civil Penalties • Cancellation of Grazing Agreements • Taking and Using of the Bald and Golden Eagle for Scientific, Exhibition, and Religious Purposes • Enforcement Provisions 	16 USC 668(a) 16 USC 668(b) 16 USC 668(c) 16 USC 668a 16 USC 668b	L	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
COLORADO NONGAME, ENDANGERED, OR THREATENED SPECIES CONSERVATION ACT [CRS 33-1-115, 33-2-101 to 33-2-107]			
<ul style="list-style-type: none"> • Willful Destruction of Wildlife • Damage or Destruction of Dens or Nests - Harassment of Wildlife 	CRS 33-6-117 CRS 33-6-128	L	
COLORADO NONGAME WILDLIFE			
<ul style="list-style-type: none"> • Protected Species • Endangered Wildlife - Designation of Species • Threatened Wildlife - Designation of Species • Nongame Wildlife - Designation of Species 	2 CCR 406-8 Article I, #1000 Article II, #1002 Article III, #1003 Article IV, #1004	L	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

Handwritten initials/signature

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
FISH AND WILDLIFE COORDINATION ACT [16 USC 661 et seq.]			
<ul style="list-style-type: none"> • Purpose • Impounding, Diverting, or Controlling of Waters • Impoundment or Diversion of Waters • Rules and Regulations • Effects of Sewage and Industrial Waters • Authorization of Appropriations • Penalties • Definitions 	16 USC 661 16 USC 662 16 USC 663 16 USC 664 16 USC 665 16 USC 666 16 USC 666a 16 USC 666b	A/L	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
NATIONAL HISTORIC PRESERVATION ACT (NHPA) [16 USC 470 et. seq.]			
IDENTIFYING HISTORIC PROPERTIES	36 CFR 800		
<ul style="list-style-type: none"> Assessing Information Needs Locating Historic Properties Evaluating Historical Significance Where No Historic Properties are Found Historic Property Found 	4(a) 4(b) 4(c) 4(d) 4(e)	L	
ASSESSING EFFECTS OF THE ACTIVITY ON THE PROPERTY	36 CFR 800 5(a)-(e)	L	
DOCUMENTATION REQUIREMENTS	36 CFR 800 8(a)-(d)	L	
CRITERIA OF EFFECT AND ADVERSE EFFECT	36 CFR 800 9(a)-(c)	L	
PROTECTING NATIONAL HISTORIC LANDMARKS	36 CFR 800 10	L	
HISTORIC PROPERTIES DISCOVERED DURING IMPLEMENTATION	36 CFR 800 11	L	
EMERGENCY UNDERTAKINGS	36 CFR 800 12	L	
PRESERVATION OF AMERICAN ANTIQUITIES	43 CFR 3	L	
PROTECTION OF ARCHEOLOGICAL RESOURCES	43 CFR 7	L	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

26 26

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
COLORADO HISTORICAL, PREHISTORICAL, AND ARCHAEOLOGICAL RESOURCES [CRS 24-80-401 TO 410]			
ARCHAEOLOGICAL RESOURCES PROTECTION ACT [16 USC 470, Chapter 1B]			
PROTECTION OF ARCHAEOLOGICAL RESOURCES UNIFORM REGULATIONS	36 CFR 296		
<ul style="list-style-type: none"> Purpose Authority Definitions Prohibited Acts Permit Requirements and Exceptions Application for Permits and Information Collection Notification to Indian Tribes of Possible Harm to, or Destruction of, Sites on Public Lands Having Religious or Cultural Importance Relationship to Section 106 of the National Historic Preservation Act Custody of Archeological Resources Determination of Archeological or Commercial Value and Cost of Restoration and Repair Assessment of Civil Penalties Civil Penalty Amounts Other Penalties and Rewards Confidentiality of Archeological Resource Information Report 	1 2 3 4 5 6 7 12 13 14 15 16 17 18 19	L	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
ARCHAEOLOGICAL AND HISTORICAL PRESERVATION ACT (AHPA) [16 USC 469a-1j]			
<ul style="list-style-type: none"> • Notification and Request for Preservation of Data • Survey of Sites, Preservation of Data, Compensation 	16 USC 469a-1(a) 16 USC 469a-1(b)	L	Differs from NHPA in that it encompasses a broader scope of resources than those listed on the National Register and requires only preservation of the data (including analysis and publication)

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

28

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SAFE DRINKING WATER ACT (SDWA) [42 USC 300f et. seq.]			
COLORADO PRIMARY DRINKING WATER REGULATIONS	5 CCR 1003-1, [40 CFR 141]		These regulations may be relevant and appropriate to surface water under their current use classifications
<ul style="list-style-type: none"> • MCL for Microbiological Contaminants • MCL for Turbidity • MCLs for Inorganic Chemicals • MCLs for Organic Chemicals <ul style="list-style-type: none"> - MCL for Volatile Organic Chemicals (VOCs) - MCL for Total Trihalomethanes (TTHMs) - MCLs for Synthetic Organic Chemicals (SOCs) • MCLs for Radioactivity <ul style="list-style-type: none"> - MCLs for Radium-226, Radium-228, and Gross Alpha Particle Activity in Community Water Systems - MCLs for Beta Particle and Photon Radioactivity From Man-Made Radionuclides in Community Water Systems 	3 1 2 4 1 1 5 2 1 5 2 2 5 2 4 5 2 3 6 1 1 6 1 2	C	When permanent structures are put in place so that surface waters from RFETS no longer flow into, or have the potential to flow into, immediate downstream drinking water supplies, the existing domestic use classification would not be considered relevant or appropriate. When these structures are in place, the MCLs (MCLGs) will not be relevant and appropriate.
MAXIMUM CONTAMINANT LEVEL GOALS	40 CFR 141		Non-zero MCLGs would also be relevant and appropriate to surface water possessing drinking water supply use classifications. MCLGs equal to zero establish unattainable goals and are therefore not ARARs according to the NCP.
<ul style="list-style-type: none"> • MCLGs for Organic Contaminants • MCLGs for Inorganic Contaminants • MCLGs for Microbiological Contaminants 	50 51 52	C	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
The State of Colorado is authorized to administer portions of the hazardous waste management program (e.g., RCRA) to regulate the generation, treatment, storage, and disposal of hazardous waste within Colorado. As such, the Colorado regulations would be applicable to the management of hazardous waste. These regulations may also be relevant and appropriate in situations where a remediation waste is "sufficiently similar" to a RCRA-listed waste (e.g., waste which was generated and disposed of prior to the effective date of regulation) or when the proposed remedial action is similar to a RCRA-regulated activity and would be appropriate to ensure that the activity is protective of human health and the environment. Although the Colorado hazardous waste management regulations are similar to the federal requirements, both the federal and state regulatory citations are provided for reference purposes and to denote that both federal and state requirements were considered in establishing the identifying the ARAR requirement adopted for the remediation of the RFETS. Only substantive portions of the regulations are required under CERCLA actions for onsite activities.			
SITING OF HAZARDOUS WASTE DISPOSAL SITES	6 CCR 1007-2	L	
<ul style="list-style-type: none"> • Minimum Design Performance Criteria for Off-Site Hazardous Waste Disposal Sites and On-Site Hazardous Waste Landfills • Requirements for Siting and Design of Off-Site Hazardous Waste Disposal Sites and On-Site Hazardous Waste Landfills 	Part 2 4 Part 2 5		
GENERATOR STANDARDS	6 CCR 1007-3, 262 [40 CFR 262]	A	Persons who generate solid wastes are required to determine if the waste is hazardous. The definition and procedures contained in 6 CCR 1007-3, 261 [40 CFR 261] are to be followed to make this determination.
<ul style="list-style-type: none"> • Hazardous Waste Determinations • Record Keeping and Reporting Requirements - Record Keeping and Reporting 	11 40 to 43		

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
GENERAL FACILITY STANDARDS			
• Waste Analysis	6CCR 1007-3, 264 Subpart B	A/L	Existing security measurements will be used and, where necessary, upgraded to prevent unknown access to hazardous wastes
• Security	[40CFR 264 Subpart B] 13(a)(1) to (3)	A/L	
	14	A/L	
• General Inspection Requirements	15(a) to (c)	A/L	Inspections will be conducted as a standard of control to prevent release of hazardous waste constituents to the environment or a threat to human health Corrective actions will be taken resolve deficiencies
• Personnel Training	16	C/A	Personnel will be properly trained to prevent mismanagement of hazardous waste and/or regulatory violations
• General Requirements For Ignitable, Reactive, Or Incompatible Wastes	17(a) and (b)	C/A	Procedures will be implemented to prevent accidental ignition or reaction of ignitable or reactive waste, or the mixing of incompatible waste
• Construction Quality Assurance Program	19	A/L	A construction QA program will be implemented for the construction of any new hazardous waste disposal site

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
GENERAL FACILITY STANDARDS (continued) Installation Standards <ul style="list-style-type: none"> • Seismic Considerations • Installation Standards <ul style="list-style-type: none"> - Floodplains - Hazardous Waste Disposal 	6 CCR 1007-3, 264, Subpart B [40 CFR 264, Subpart B]	A/L	Hazardous waste management facilities will not be located within a 100-year floodplain Hazardous waste is not to be disposed directly under or into surface water or groundwater that has a potential or existing beneficial use or that is in direct communication with an aquifer, unless said disposal is accomplished pursuant to a UIC permit
	18(a)		
	18(b)		
	18(d)		
PREPAREDNESS AND PREVENTION <ul style="list-style-type: none"> • Design and Operation of Facility • Required Equipment • Testing and Maintenance of Equipment • Access to Communications or Alarm System • Required Aisle Space • Arrangements with local Authorities 	6 CCR 1007-3, 264, Subpart C [40 CFR 264, Subpart C]	A/L	Hazardous waste facilities will be designed to minimize the potential for incidents Equipment will be provided to respond to credible incidents and arrangements with emergency response units will be executed
	31		
	32		
	33		
	34		
	35		
	37		

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

32

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
CONTINGENCY PLAN AND EMERGENCY PROCEDURES <ul style="list-style-type: none"> • Purpose and Implementation • Content of Plan • Emergency Coordinator • Emergency procedures 	6 CCR 1007-3, 264, Subpart D [40 CFR 264 Subpart D] 51(a) 52(a) 55 56(a) to (i)	A	The existing RFETS contingency plan will be reviewed and revised accordingly to ensure that the procedures are adequate to respond to any new conditions posed by the remedial actions and/or the operation of new hazardous waste management facilities
	6 CCR 1007-3, 264, Subpart F [40 CFR 264, Subpart F] 91(a) 95	A/L	Groundwater monitoring will be conducted for hazardous waste for hazardous waste management units to ensure that contaminants which could adversely impact human health or the environment are not migrating into groundwaters as measured at the point of compliance The point of compliance for hazardous waste disposal units at which waste will remain after closure of the RFETS is interpreted to be the RFETS site boundary
GROUND WATER PROTECTION <ul style="list-style-type: none"> • Required Programs • Point of Compliance 			

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

33

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
GROUND WATER PROTECTION (continued)			
<ul style="list-style-type: none"> • Ground-Water Protection Standard • Hazardous Constituents • Concentration Limits 	<p>6 CCR 1007-3, 264, Subpart F [40 CFR 264, Subpart F]</p> <p>92 93 94(a) and (b)</p>	C	<p>As part of the RFI/RI and CMS/FS process, remediation goals which are protective of human health and the environment will be established for the cleanup of groundwater. The RCRA process for establishing groundwater protection standards will be incorporated when selecting the remedial goals.</p> <p>Included in the selection process are background concentrations, drinking water standards (e.g., MCLs), and alternative concentration limits (ACLs). It is intended to establish ACLs that will maintain the designated use of the water quality (i.e., MCLs and Colorado water quality standards - 5 CCR 1002-8, Section 3 11.5) at the RFETS boundary.</p>
GROUND WATER PROTECTION (continued) <ul style="list-style-type: none"> • Compliance Period • General Ground-Water Monitoring Requirements <ul style="list-style-type: none"> - Number of Wells - Casing - Sampling and Analysis Procedures - Statistical Methods Utilized 	<p>6 CCR 1007-3, 264, Subpart F [40 CFR 264, Subpart F]</p> <p>96 97(a) and (b) 97(c) 97(d) to (g) 97(h) and (i)</p>	A	<p>For any hazardous waste remaining onsite following the completion of closure activities, groundwater monitoring will be performed to demonstrate protectiveness of the selected remedial actions. For monitoring that is being conducted as part of a RCRA corrective action, compliance period is extended until it can demonstrate that the ground-water protection standard has not been exceeded for a period of three consecutive years. The five-year review provisions of CERCLA Section 121(c) (see 40 CFR 300.430(f)(4)(ii)) will be considered in establishing the compliance period.</p> <p>Any additional monitoring wells that are installed as a result of remedial activities for the monitoring of hazardous waste management sites will conform to existing approved RCRA groundwater monitoring program.</p>

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

Handwritten initials/signature

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
GROUND WATER PROTECTION (continued)			
<ul style="list-style-type: none"> • Detection Monitoring Program <ul style="list-style-type: none"> - Parameters or Constituents - System and Procedures - Statistical Exceedences • Compliance Monitoring Program <ul style="list-style-type: none"> - Monitoring - Installation of System - Sampling Procedures and Statistical Methods - Evidence of Increased Contamination - Flow Rates • Corrective Action Program <ul style="list-style-type: none"> - Compliance with Groundwater Protection Standard - Prevent Hazardous Constituents from Exceeding Concentration Limits - Time Frame - Groundwater Monitoring - Corrective Action Measures • Corrective Action for Solid Waste Management Units 	<p>6 CFR 1007-3, 264, Subpart F [40 CFR 264, Subpart F]</p> <p>98(a) 98(b) to (f) 98(g) 99(a) 99(b) 99(c), (f), and (g) 99(d) 99(e) 100(a) 100(b) 100(c) 100(d) 100(e) and (f) 101(a) and (c)</p>	A	<p>Per the IAG, the RCRA corrective action provisions are being integrated with the CERCLA remedial action provisions. Therefore, the Parties intend that compliance with activities covered by the IAG will be deemed to achieve compliance with CERCLA, 42 USC § 9601 et seq., to satisfy the corrective action requirements of sections 3004(u) and (v) of RCRA, 42 USC § 6924(u) and (v), for a RCRA permit, and section 3008(h), 42 USC § 6928(h), for interim status facilities, the closure and corrective action requirements of CHWA, and to meet or exceed all applicable or relevant and appropriate Federal and State laws and regulations, to the extent required by section 121 of CERCLA, 42 USC § 9621</p>

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

35

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
CLOSURE AND POST-CLOSURE	6 CCR 1007-3, 264, Subpart G [40 CFR 264, Subpart G]		The substantive requirements for closure and post-closure will be complied with
<ul style="list-style-type: none"> • Closure Performance Standards • Disposal or Decontamination of Equipment, Structures and Soils • Maintenance, Monitoring, Security, and Care • Post-Closure Use of Property 	111 114 117(a)(1) and (b) 117(c)	A	
USE AND MANAGEMENT OF CONTAINERS	6 CCR 1007-3, 264, Subpart I [40 CFR 264, Subpart I]		Hazardous waste containers will be managed in accordance with approved handling procedures and be stored at RCRA permitted storage areas and/or designated temporary units. Container storage areas will be closed in accordance with approved closure plans or IM/TRA documents
<ul style="list-style-type: none"> • Condition of Containers • Compatibility of Waste with Containers • Management of Containers • Inspections • Containment <ul style="list-style-type: none"> - Containment System Design and Operation - Containment for Ignitable or Reactive Wastes - Containment for Incompatible Wastes • Closure 	171 172 173 174 175(b) to (d) 176 177 178	A	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

36

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
TANK SYSTEMS	6 CCR 1007-3, 264, Subpart J [40 CFR 264, Subpart J]		Either existing or new tank systems will be used to treat or store hazardous waste generated as a result of remedial activities. Existing tank systems will only be used if it is determined that the tank system is adequate and has sufficient integrity to prevent failure of the tank system during the proposed new use. Existing tank systems will be closed in accordance with approved closure plans or IM/IRA documents.
<ul style="list-style-type: none"> • Design and Installation of New tank Systems or Components • Containment and Detection of Releases <ul style="list-style-type: none"> - Secondary Containment - Design and Construction - Secondary Containment Devices <ul style="list-style-type: none"> -- External Liner -- Vault System -- Double-Walled Tanks -- Ancillary Equipment • General Operating Requirements • Inspections • Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems • Closure and Post-Closure Care • Special Requirements for Ignitable or Reactive Wastes • Special Requirements for Incompatible Wastes 	192 193(a) and (b) 193(c) 193(d) 193(e)(1) 193(e)(2) 193(e)(3) 193(f) 194 195 196 197 198 199	A	
SURFACE IMPOUNDMENTS	6 CCR 1007-3, 264, Subpart K [40 CFR 264, Subpart K]		All existing hazardous waste surface impoundments (e.g., Solar Evaporation Ponds) have been removed from service and are currently being closed. The closure post-closure, and construction inspection requirements are included as part of the OU4 IM/IRA. In the event surface impoundments units are identified as part of a potential remedy Subpart K will become an ARAR.
<ul style="list-style-type: none"> • Monitoring and Inspection • Closure and Post-Closure Care 	226 228	A	

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
WASTE PILES	6 CCR 1007-3, 264, Subpart L [40 CFR 264, Subpart L]	--	There are no current or planned waste piles at the RFETS, therefore, the Subpart L provisions are not being listed as an ARAR
LAND TREATMENT	6 CCR 1007-3, 264, Subpart M [40 CFR 264 Subpart M]	--	In the event land treatment units are identified as part of a potential remedy, Subpart M will become an ARAR
LANDFILLS	6 CCR 1007-3, 264, Subpart N [40 CFR 264 Subpart N]	--	Not an ARAR because any onsite disposal will be under the CAMU rule
INCINERATORS	6 CCR 1007-3, 264, Subpart O [40 CFR 264, Subpart O]	A	These regulations are ARARs for the closure and/or the design, construction, and operation of a new incinerator system
<ul style="list-style-type: none"> Waste Analysis Principal Organic Hazardous Constituents Performance Standards Operating Requirements Monitoring and Inspections Closure 	341 342 343(a) to (c) 345 347 351		

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

38 37

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS			
<ul style="list-style-type: none"> • Corrective Action Management Units <ul style="list-style-type: none"> - Standards for Designating a CAMU - Requirements for Groundwater Monitoring - Closure Requirements for CAMUs • Temporary Units • Requirements for TUs • Factors for Establishing Standards for TUs 	6 CCR 1007-3, 264, Subpart S [40 CFR 264, Subpart S] 552(c) and (d) 552(e)(3) 552(e)(4) 553(b) 553(c)	A	Colorado has adopted a CAMU/TU rule. The provisions for designated CAMUs and TUs will be followed to facilitate implementation of a corrective action
MISCELLANEOUS UNITS			
<ul style="list-style-type: none"> • Environmental Performance Standards <ul style="list-style-type: none"> - Groundwater and Subsurface Protection - Surface Water, Wetland and Surface Soil Protection - Air Protection • Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action • Post-Closure Care 	6 CCR 1007-3, 264, Subpart X [40 CFR 264, Subpart X] 601(a) 601(b) 601(c) 602 603	A	These standards are being listed as ARARs in the event that a miscellaneous unit is selected for the treatment of hazardous waste pursuant to the CMS/FS process

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
AIR EMISSION STANDARDS FOR PROCESS VENTS <ul style="list-style-type: none"> Standards Process Vents Standards Closed-Vent Systems and Control Devices Test Methods and Procedures Record Keeping Requirements Reporting Requirements 	6 CCR 1007-3, 264, Subpart AA	A	These standards will be incorporated into the design of process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10-ppm (by weight)
	1032(a) to (c)		
	1033		
	1034		
	1035		
	1036		

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

Handwritten initials/signature

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS	6 CCR 1007-3, 264, Subpart BB [40 CFR 264, Subpart BB]	A	These standards will be incorporated into the design of remediation equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight excluding equipment that is in vacuum service
• Standards Pumps in Light Liquid Service	1052		
• Standards Compressors	1053		
• Standards Pressure Relief Devices in Gas/Vapor Service	1054		
• Standards Sampling Connecting Systems	1055		
• Standards Open-Ended Valves or Lines	1056		
• Standards Valves in Gas/Vapor or Light Liquid Service	1057		
• Standards Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light or Heavy Liquid Service, Flanges, and Other Connectors	1058		
• Standards Closed-Vent Systems and Control Devices	1060		
• Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service Percentage of Valves Allowed to Leak	1061		
• Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service Skip Period Leak Detection and Repair	1062		
• Test Methods and Procedures	1063		
• Record Keeping Requirements	1064		
• Reporting Requirements	1065		

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
CONTAINMENT BUILDINGS	6 CCR 1007-3, 264, Subpart DD [40 CFR 264 Subpart DD]	A	These standards will be incorporated into the design of a containment building that is built to facilitate the management of hazardous remediation waste
<ul style="list-style-type: none"> • Design and Operating Standards • Closure and Post-Closure Care 	1101 1102		
AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (PROPOSED)	56 FR 33490, Proposed Rule for 40 CFR 264, Subpart CC	TBC	
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE	40 CFR 267	A	Waste management plans will be developed to ensure compliance with the specific classes of hazardous waste (i.e., Recyclable Materials Used In a Manner Constituting Disposal, Burning for Energy Recovery, Recyclable Materials Utilized for Precious Metal Recovery, and Spent Lead-Acid Batteries Being Reclaimed) identified in this regulation

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

#42

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARS
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
LAND DISPOSAL TREATMENT STANDARDS	6 CCR 1007-3, 268 [40 CFR 268]		
<ul style="list-style-type: none"> • General (Subpart A) <ul style="list-style-type: none"> - Dilution Prohibition as a Substitute for Treatment - Waste Analysis - Special Rules Regarding Wastes that Exhibit a Characteristic • Prohibitions on Land Disposal (Subpart C) <ul style="list-style-type: none"> - Waste Specific Prohibitions - Solvent Wastes - Waste Specific Prohibitions - Dioxin-Containing Wastes - Waste Specific Prohibitions - California List Wastes - Waste Specific Prohibitions - First Third Wastes - Waste Specific Prohibitions - Second Third Wastes - Waste Specific Prohibitions - Third Third Wastes - Waste Specific Prohibitions - Newly Listed Wastes 	<p>30 31 32 33 34 35 36</p>	<p>A A</p>	<p>Waste management plans will be developed to ensure compliance with the Land Disposal Restrictions. The performance requirements for hazardous waste treatment systems will be based on the LDR Treatment Standards contained in Subpart C</p>

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS §§ 25-15-101 to -217)]			
LAND DISPOSAL TREATMENT STANDARDS (continued)			
<ul style="list-style-type: none"> • LDR Treatment Standards (Subpart D) <ul style="list-style-type: none"> - Treatment Standards Expressed as Concentrations in Waste Extract - Treatment Standards Expressed as Specified Technologies - Treatment Standards Expressed as Waste Concentrations - Variance from a Treatment Standard 	<p>6 CCR 1007-3, 268 [40 CFR 268]</p> <p>42 USC § 6924(d)(2) 41</p> <p>42</p> <p>43</p> <p>44</p>	A	<p>In addition to these regulations, EPA has recently promulgated Universal Treatment Standards and consolidated treatment standards for hazardous waste (see 59 FR 47982) This final rule is effective on December 19, 1994 in both authorized and non-authorized States The final rule replaces the current LDR treatment standard tables contained in Subpart D Authorized States are required to amend their regulations to obtain final authorization of the RCRA program This final rule is considered to be an ARAR for remedial actions</p>
<ul style="list-style-type: none"> • Prohibition on Storage of Restricted Waste (Subpart E) 	50	A	<p>In addition, EPA proposed a rule for the treatment of hazardous soils (see FR 48092) This proposed rule is considered to be a TBC for the treatment of contaminated soils</p>

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

#444

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE D: STATE OR REGIONAL SOLID WASTE PLANS COLORADO SOLID WASTE SITES AND FACILITIES [6 CCR 1007-2, Part 1]			
CLOSURE AND POST-CLOSURE			
<ul style="list-style-type: none"> • Minimum Standards <ul style="list-style-type: none"> - Closure of Solid Waste Disposal Sites and Facilities - Post-Closure Care and Maintenance Standards • Standards for Solid Waste Disposal Landfill Sites and Facilities <ul style="list-style-type: none"> - Closure - Post-Closure Care and Maintenance 	<p>Section 2 5 1 to 2 5 9 [40 CFR 258 60 (a)-(h)]</p> <p>Section 2 6 1 to 2 6 2 [40 CFR 258 61 (a)-(e)]</p> <p>Section 3 5 1 to 3 5 8 [40 CFR 258 60 (a)-(h)]</p> <p>Section 3 6 1 to 3 6 3 [40 CFR 258 61 (a)-(e)]</p>	A	These regulations have been identified as potential ARARs with respect to closure of solid waste disposal sites

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

45

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE I: REGULATION OF UNDERGROUND STORAGE TANKS [CRS §§ 8-20-501 to -608; CRS §§ 25-18-101 to -109]			
UNDERGROUND STORAGE TANK REQUIREMENTS	7 CCR 1101-14 6 CCR 1007-5 [40 CFR 280]	A	

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC To Be Considered

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
TOXIC SUBSTANCES CONTROL ACT (TSCA) [15 USC 2601 et seq.]			
LABELING OF PCBs AND PCB ITEMS	40 CFR 761 40 and 45	A	
DISPOSAL REQUIREMENTS	40 CFR 761		
<ul style="list-style-type: none"> • Liquid, Non-liquid PCB Waste • PCB Articles • PCB Containers • Spills • Testing Procedures 	60(a) 60(b) 60(c) 60(d) 60(g)	A	Waste management plans will be developed to ensure compliance with the specific requirements for PCB waste identified in this regulation
STORAGE REQUIREMENTS FOR PCBs	40 CFR 761		
<ul style="list-style-type: none"> • Time Limits • Facility Criteria • Temporary Storage • Inspections • Container Specifications • Marking • Laboratory Sample Exemption From Manifesting 	65(a) 65(b) and (c)(3) 65(c)(1) and (4) 65(c)(5) 65(c)(6) and (7)(i) 65(c)(8) 65(i)(2)(3)	A	
INCINERATION	40 CFR 761		
<ul style="list-style-type: none"> • Liquid PCBs - Operating Requirements • Nonliquid PCBs 	70(a)(1) to (9) 70(b)(1) and (2)	A	These regulations would only be ARARs for the construction and operation of an onsite PCB incinerator, it is envisioned that this will not occur

A - Action-Specific ARAR
 C - Chemical-Specific ARAR
 L - Location-Specific ARAR
 TBC To Be Considered

47

**TABLE 1 - DRAFT MASTER LIST OF POTENTIAL FEDERAL AND STATE ARARs
FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Requirement	Citation	Type	Comment
TOXIC SUBSTANCES CONTROL ACT (TSCA) [15 USC 2601 et seq.]			
CHEMICAL WASTE LANDFILLS	40 CFR 761		These regulations would only be ARARs for the construction and operation of an onsite PCB disposal cell, it is envisioned that this will not occur
<ul style="list-style-type: none"> • Technical Requirements <ul style="list-style-type: none"> - Soils - Synthetic Membrane Liners - Hydrologic Conditions - Flood Protection - Topography - Monitoring Systems - Leachate Collection 	75(b)(1) 75(b)(2) 75(b)(3) 75(b)(4) 75(b)(5) 75(b)(6) 75(b)(7)	A	
DECONTAMINATION	40 CFR 761 79(a) 40 CFR 761 79(b)	A	
<ul style="list-style-type: none"> • Containers • Movable Equipment 			
PCB SPILL CLEANUP	40 CFR 761		40 CFR 761 Subpart G is entitled <i>PCB Spill Cleanup Policy</i> and thus many of the sections in Subpart G, specifically for spills after May 4, 1987, are "to be considered" (TBC), 40 CFR 761 125 contains PCB cleanup requirements that may be considered enforceable substantive environmental standards and thus potential ARARs
<ul style="list-style-type: none"> • Requirements for PCB Spill Cleanup <ul style="list-style-type: none"> - Disposal of Cleanup Debris and Materials - Determination of Spill Boundaries - Spills of < 500 ppm PCBs, Involve < 1 lb of PCBs by wt - Spills of ≥ 500 ppm PCBs, Involve ≥ 1 lb of PCBs by wt - Time Limits and Actions Within the First 24 Hours - Requirements for Decontaminating Spills in Outdoor Electrical Substations - Requirements for Decontaminating Spills in Restricted Access Areas • Sampling Requirements 	125(a)(2) 125(a)(3) 125(b)(1) 125(c)(2) to (4) 125(c)(1) 125(c)(2) 125(c)(3)(i) to (v) 130(a) to (e)	TBC	

A - Action-Specific ARAR
C - Chemical-Specific ARAR
L - Location-Specific ARAR
TBC - To Be Considered

48/48